

REMARKS

Claims 1-51 are all the claims pending in the application. Applicants note that claims 13-16, 18, 20 and 25-51 have been withdrawn from consideration by the Examiner as being drawn to a non-elected invention.

I. Foreign Priority

Applicants note that the present application claims priority under 35 U.S.C. § 119. The Examiner, however, has not acknowledged the claim for priority or acknowledged receipt of the certified copy of the priority document.

In the previous response filed on June 7, 2005, Applicants requested that the Examiner acknowledge the claim for foreign priority and receipt of the certified copy of the foreign priority document, and submitted a copy of the Claim for Priority under 35 U.S.C. 119 and a copy of the stamped postcard receipt from the PTO indicating that the certified copy of the priority document was received by the PTO.

In view of the foregoing, Applicants kindly request that the Examiner acknowledge the claim for priority and acknowledge receipt of the certified copy of the priority document.

II. Election/Restriction

In item 1 of the Office Action, the Examiner has indicated that claims 9-12, 17, 19, and 21-24 are now being rejoined and examined on the merits. Applicants note, however, that the Examiner has not addressed claims 13-16, 18, 20 and 25 on the merits, nor has the Examiner indicated why these claims are not being rejoined. In this regard, Applicants note that claims 13-

16, 18, 20 and 25 depend from claim 9, and should be examined on the merits for the reasons discussed in the previous response filed on June 7, 2005. If the Examiner does not believe that these claims should be examined on the merits, Applicants kindly request that the Examiner provide an explanation as to how claims 13-16, 18, 20 and 25 are considered to be in a different species than claims 1-12, 17, 19 and 21-24.

In addition, in items 2 and 3 of the Office Action, the Examiner has indicated that claims 26-27 and claims 28-29 are related as combination and subcombination. In this regard, the Examiner correctly indicates that inventions in this relationship are distinct if it can be shown that the combination as claimed does not require the particulars of the subcombination.

Applicants point out to the Examiner, however, that each of claims 26, 28 and 29 (e.g., the combination claims) include all of the features recited in claim 1 (e.g., the subcombination claim). Accordingly, as the combination claims include all of the features recited in a subcombination claim, Applicants respectfully submit that it is not proper to issue a restriction between such claims. Accordingly, claims 26-30 should be examined on the merits.

III. Claim Rejections under 35 U.S.C. § 103(a)

The Examiner has rejected claims 1, 6, 7, 9, 17, 21 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Shimada (U.S. 6,504,705) in view of Aoyama (U.S. 6,433,417). Applicants respectfully traverse this rejection on the following basis.

Claim 1 is drawn to an electrolytic capacitor which includes a valve metal element for an anode having a capacitor forming part and an electrode lead part, wherein at least one through

hole is formed in the electrode lead part of the valve metal element for an anode to expose a core of the valve metal element to an outside of the electrolytic capacitor. Applicants respectfully submit that Shimada and Aoyama fail to teach or suggest such a combination of features.

In the Office Action, the Examiner recognizes that Aoyama does not disclose at least one through hole being formed in an electrode lead part of a valve metal element for an anode to expose a core of the valve metal element to an outside of the electrolytic capacitor. The Examiner, however, applies Aoyama and alleges that Aoyama cures this deficiency of Shimada. Applicants respectfully disagree.

Regarding Aoyama, Applicants note that this reference discloses a capacitor element (chip) that is connected to leads 4, 5 to form a package 3 (see col. 5, lines 8-11 and Fig. 5a). As explained in Aoyama, one end of each of the leads 4, 5 is connected to a capacitor element within the package 3, and the other end of each of the leads 4, 5 has a through hole 4a, 5a formed therein (see col. 5, lines 11-15).

Thus, in Aoyama, while the leads 4, 5 are connected to a capacitor element that is within the package 3, Applicants respectfully point out to the Examiner that the leads 4, 5 of Aoyama do not form a part of the capacitor element itself. Instead, the capacitor element of Aoyama is fully disposed within the package 3.

Accordingly, as the leads 4, 5 of Aoyama do not form a part of the capacitor element itself, Applicants respectfully submit that the leads 4, 5 clearly cannot correspond to electrode leads parts of the valve metal element of the capacitor element itself. Further, as the leads 4, 5 of Aoyama do not form a part of the capacitor element, Applicants respectfully point out that the

through holes 4a, 5a of Aoyama are clearly not formed in an electrode lead part of a valve metal element for an anode so as to expose a core of the valve metal element to an outside of the electrolytic capacitor, as recited in claim 1.

In other words, while Aoyama discloses leads 4, 5 that each have a through hole formed therein, the leads 4, 5 of Aoyama are not a part of the electrolytic capacitor itself, and therefore, do not expose a core of a valve metal element of the electrolytic capacitor to an outside of the electrolytic capacitor. In contrast, Applicants note that the through holes 4a, 5a of Aoyama are merely provided to allow solder to flow therein, thereby providing for a more rigid connection of the package 3 to the substrate 11 (see col. 5, lines 31-37).

According to the present invention, by forming a through hole in the electrode lead part of a valve metal element for an anode so as to expose the core of the valve metal element to the outside of the electrolytic capacitor, it is possible to reduce the interface electrical resistance of a connection area between an electric conductor and the portion where the core of the valve metal element is exposed to the outside.

In view of the foregoing, Applicants respectfully submit that the cited prior art, either alone or in combination, fails to disclose, suggest or otherwise render obvious an electrolytic capacitor having at least one through hole formed in the electrode lead part of a valve metal element for an anode to expose a core of the valve metal element to an outside of the electrolytic capacitor, as recited in claim 1.

Accordingly, Applicants submit that claim 1 is patentable over the cited prior art, an indication of which is kindly requested. Claims 6 and 7 depend from claim 1 and are therefore considered patentable at least by virtue of their dependency.

Regarding claim 9, Applicants note that this claim also recites the feature of an electrolytic capacitor that includes at least one through hole formed in the electrode lead part of the valve metal element for an anode to expose a core of the valve metal element to an outside of the electrolytic capacitor.

For at least similar reasons as discussed above with respect to claim 1, Applicants submit that the applied prior art fails to disclose, suggest or otherwise render obvious such a feature. Accordingly, Applicants submit that claim 9 is patentable over the cited prior art, an indication of which is kindly requested. Claims 13-18, 20, 21, 23 and 25 depend from claim 9 and are therefore considered patentable at least by virtue of their dependency.

Further, regarding claims 26, 28 and 29 Applicants note that each of these claims also recites the feature of an electrolytic capacitor that includes at least one through hole formed in the electrode lead part of the valve metal element for an anode to expose a core of the valve metal element to an outside of the electrolytic capacitor. For at least similar reasons as discussed above with respect to claim 1, Applicants submit that the applied prior art fails to disclose, suggest or otherwise render obvious such a feature.

Accordingly, Applicants submit that claims 26, 28 and 29 are patentable over the cited prior art, an indication of which is kindly requested. Claim 27 depends from claim 26, and claim

30 depends from claim 28. Accordingly, Applicants submit that these claims are patentable at least by virtue of their dependency.

IV. Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 2-5, 8, 10-12, 19, 22 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all the limitations of the base claim and any intervening claims.

V. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may best be resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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